# Entrance to Aspen Reevaluation Status Report Summary of Traffic and System Management Analysis

November 16, 2006 EOTC Meeting

### Reevaluation Requirements

- □ 23 Code of Federal Regulations 771.129 (c):
  - After EIS approval, consultation with FHWA is required prior to requesting major approvals to determine whether or not the approved FEIS remains valid for the requested action.

### Reevaluation Purpose

- □ Is the project substantially different or changed, resulting in environmental impacts that were not previously identified and evaluated?
- ☐ Has the affected environment changed, and will an impact occur that was not previously evaluated?
- □ Have regulations or laws changed, and are there new requirements that were not previously addressed?
- □ Do changes require additional environmental documentation, or do the Final EIS and resultant project decisions remain valid?

# Why Reevaluate Preferred Alternative Only?

- □ This is a technical analysis of the action previously approved (1998 ROD)
- □ Purpose is not to re-open project planning
- □ Purpose is to determine if decisions made remain valid for the approved action, prior to next major step

### Three Potential Outcomes

- Existing, Approved Final EIS and Project Decisions Remain Valid
- □ Revise ROD if decision is made to approve a different, fully evaluated alternative that meets the Purpose & Need
- □ A Supplemental NEPA document is required to move project forward

### Current Status of Reevaluation

- □ Technical Reports
  - All are drafted (22)
  - Team and agency reviews are underway; 90% are in final review stage
- □ Reevaluation
  - To be completed when Technical Reports are final

### Traffic Analysis Report

- □ Final EIS: 1993-94 (existing) and 2015 (future)
- □ Reevaluation: 2005 (existing) and 2030 (future)
- Updates based on CDOT statewide planning methodology, and 2030 traffic forecasts prepared using CDOT traffic database – trends and actual counts
- □ Updates include growth factors that capture effects of Transportation Management (TM) program on traffic growth

### Highway Traffic Congestion Level of Service (LOS)

- A Best operating conditions considered free flow.
- B Reasonably free-flowing conditions.
- C Constrained constant flow below speed limits, with additional attention required by drivers to maintain safe operations.
- D Traffic operations approaching unstable flow with high passing demand and passing capacity near zero.
- E Unstable flow near capacity.
- F Worst conditions with heavily congested flow and traffic demand exceeding capacity.

### **Existing Traffic Operations**

- □ Much of the State Highway 82 corridor was at peak-period capacity in 1993 LOS E and F
- □ Under already saturated conditions, cannot pass more traffic through the corridor during peak hours in 2005
- □ Increases in 2005 traffic volumes have resulted in extended peak-hour queues and a longer duration of congestion.

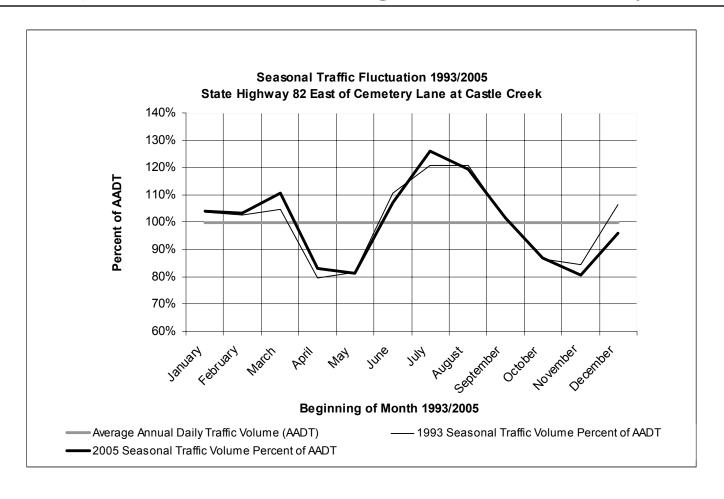
### LOS – Summer Average Peak Hour

Section (Mileposts)	1993 Average PM Peak Hour Volume	2005 Average PM Peak Hour Volume	Maximum Capacity (Total of Both Lanes)	Level of Service 1993 / 2005
Buttermilk Ski Area to Maroon Creek Bridge (38.5 to 39.2)	1,950	2,370	2,420	E/E
Maroon Creek Bridge to Maroon Creek Road (39.2 to 39.8)	2,030	2,380	2,420	E/E
Maroon Creek Road to Cemetery Lane (39.8 to 40.1)	2,280	2,400	2,420	E/F
Cemetery Lane to 7 <sup>th</sup> Street and Main Street (40.1 to 40.5)	2,430	2,440	2,260	F/F

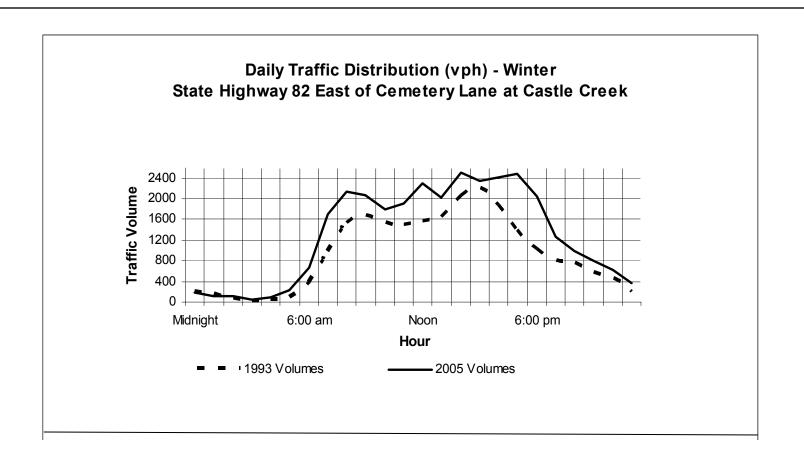
### Consequences of Corridor Saturation

- □ Increases in overall (average annual) traffic volumes are small due to TM program
- □ Even small increases during peak hour are enough to drop the LOS between Maroon Creek and Cemetery Lane from LOS E to F.
- □ AM Peak LOS F, Buttermilk to 7<sup>th</sup> & Main
- □ PM Peak LOS F, 4<sup>th</sup> & Main to Buttermilk

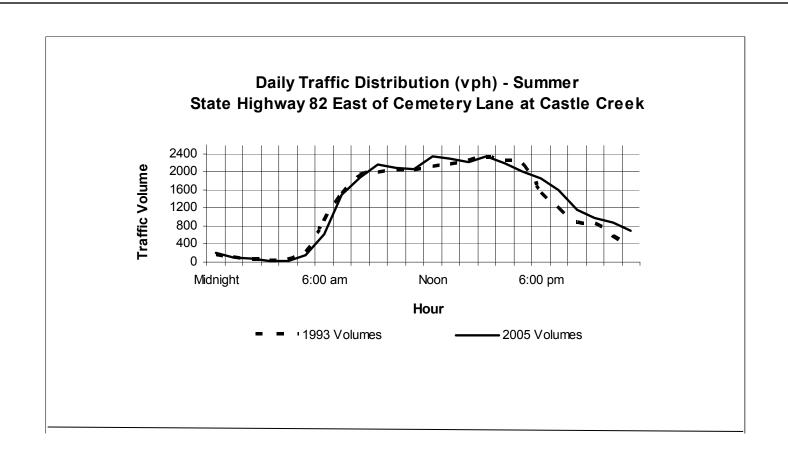
### Seasonal Traffic Volume – Distinct Seasonal Peaks (Percent of Average Annual Daily Traffic)



### Traffic Distribution by Time of Day Winter



## Traffic Distribution by Time of Day Summer



# Summary of Existing Traffic Operations

- □ City of Aspen implemented Incremental
  Transportation Management (TM) Program in 1995
- ☐ Goal: maintain future traffic volumes at or below 1993-94 levels in the project corridor
- □ TM Program has kept *Average Daily Traffic* during peak season essentially the same as 1993-94 for 2005 (Corridor saturated; LOS E or F)
- □ Peak-hour volume increases result in extended queues and longer congestion duration

### Future Traffic Operations

- □ 2030 with No Action and Continued TM Program:
  - Traffic demand (Cemetery Lane) predicted to be 44,800 vehicles per day (summer) and 37,000 (winter)
  - Summer peak hour = 3,800 vehicles per hour
- Far exceeds roadway capacity and available parking
- Period of the day operating under LOS F is extended
- □ Increases in down-valley traffic volumes will extend congestion and failing LOS down-valley along the entire corridor

### Future Traffic Operations

- Serving existing and future person-trip demand on the State Highway 82 project corridor will require combination of general purpose lanes and transit facilities
- High-capacity transit facilities (light rail transit, buses, or other dedicated-vehicle transit modes) critical to providing capacity for forecasted persontrips in 2015 and 2030
- □ Combination will help achieve stated community goal of maintaining 1993-94 traffic levels

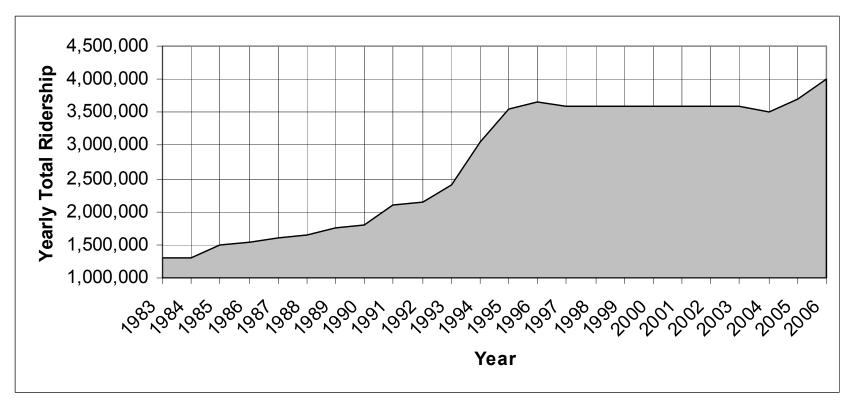
### System Management Report

- Relationships between transportation modes
- System management concepts
- Incremental Transportation Management (TM) Program
- Parking demand
- □ Future transit ridership characteristics

### **Existing Transit**

- □ Serving 14 routes: 7 city, 3 skier shuttle, 3 valley routes, and a direct route between Aspen and Brush Creek/SH 82 or Snowmass Mall
- □ 2005: All RFTA services = 3.7 million rides with 1.7 million provided by commuter services
- □ 2006: Ridership as of Sept. 2006 is up 10% over 2005 levels - total 2006 ridership anticipated to exceed 4 million

### RFTA Ridership



Note: 2006 total is estimated based on September 2006 actual ridership data showing 10% increase over 2005

### Constraints to Increasing Ridership

- □ Getting to the next level of ridership (such as increase between 1994 and 1996) will require major improvements to the transit system to accommodate additional capacity
- □ Implementation of the exclusive bus lanes/LRT is a critical step in providing additional transit system capacity & meeting

# Transit Operations with Exclusive Bus Lanes in Place

- □ 5-minute headways provided on a consistent basis for buses operating between Rubey Park and the Brush Creek park-and-ride
- During evening peak (3:00 6:00 p.m.) a total of 37 bus trips in dedicated bus lanes would carry an estimated 1,665 passengers in the peak direction.
- □ 5-minute headways could be maintained using approximately 8 to 9 vehicles; further demand can be met by adding vehicles

### Summary of System Management Analysis

- □ Incremental TM Program must continue to maintain 1993-94 traffic volumes
- □ Transit ridership is again on the increase (10% in 2006 over 2005 levels)
- □ Substantial ridership jump now requires major increase in capacity through infrastructure improvements

#### **Bottom Line**

- Buses must begin making 15-minute trip between Rubey Park and Brush Creek
- □ The only way to do this is for buses to run in exclusive lanes, and get out of mixed traffic

### Reevaluation Findings

#### What's Next?

- □ Complete Reevaluation Document
- □ City of Aspen Open Space Vote
- □ Project Funding
- □ EOTC Public Process

### **EOTC Public Process**